EXHIBIT E

Case 1:21-cv-06440-PAE Document 34-5 Filed 09/24/21 Page 2 of 9

Certificate of Registration



Thi rtificate issued under the seal of the Copyright Office in accordance with title 17, Uni ed States Code, attests that registration has been made for the work identified be ow. The formation on this certifit te has been made a part of the Copyright Office records.

Registration Number

TX 8-966-600

Effective Date of Registration:

April 28, 2021

Registration Decision Date:

May 27, 2021

been made a part of the Copyright Office records.

Shin Pulmuttu

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Title	5
Title of Work:	Wireline Issuance
Completion/Publication _	1
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Author	
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Rights and Permissions _	\$59 655 9 1959 1250 1250 1250 1250 1250 1250 1250 1250
Organization Name: Name: Email:	Butzel Long Jennifer Ann Dukarski dukarski@butzel.com



Case 1:21-cv-06440-PAE Document 34-5 Filed 09/24/21 Page 3 of 9

Name: Jennifer Dukarski Date: April 28, 2021

Wireline Issuance

Rick Dudley and Sam Hart

November 19, 2019

The genesis block will issue three lump sums:

- 300 Million (20% of supply cap) WIRE tokens to SAFT participants. These tokens may be delegated, but not traded for one year, at which point they will be unrestricted.
- 112.5 Million (7.5% of supply cap) WIRE tokens to Wireline team members. These tokens have the same restrictions as SAFT tokens.
- 1087.5 Million (remaining 72.5% of supply cap) WIRE tokens to an escrow/treasury, which will be distributed via the block reward or available for purchase from the conditional escrow as described below.

The genesis block and all subsequent blocks will distribute a block reward, drawn from the on-chain escrow, which is calculated as:

$$B_n = B_0 - nD$$

where,

B = Block reward

n =Epoch number

 B_0 = Initial block reward

D = Decrement

Each block a portion of this reward will be split among the validators and the Wireline foundation. The validators will receive half of the block reward according to the formula above until the decrement multiplier brings the per-epoch block reward to zero.

The Wireline Foundation may receive a maximum of half the block reward, but the quantity of the block reward they receive will depend on the value of an aggregate performance metric, aimed to evaluate how widely the foundation has distributed tokens, the activity of those token holders, and the cashflows of projects the foundation has funded.

Any funds the Foundation does not receive due to missing target metrics will be allocated to the treasury, such that the cost function's spot price is unchanged.

VDF challenges

If token holders with unstaked WIRE fail a VDF challenge then they will be subject to having their stake slashed. In this instance, a minority fraction of slashed funds will be distributed to the actor who submitted proof of such behaviour. The remainder will be allocated to the treasury.

Consensus slashing

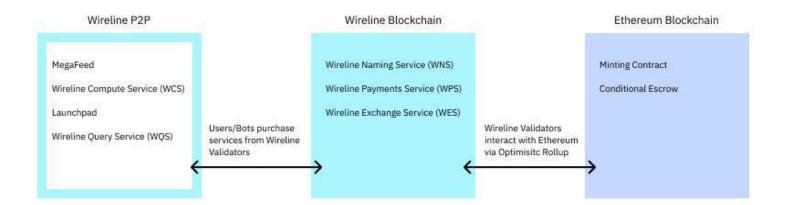
If validators exhibit byzantine behavior their stake may be slashed, according to the slashing rules. In this event, the majority of tokens will be burned, and a minority fraction of the slashed tokens will be distributed, via the Ethereum Blockchain to the actor who identified the malicious behavior.

Consensus transaction fees

Validators will get a portion of each transaction included in a block they have created.

Service transaction fees

Service providers will take a portion of each service transaction, such as sending WIRE using WPS, opening a CDP, or a project service.



Conditional escrow

WIRE will be minted using a custom Ethereum Optimistic Roll-up (ORU) contract resembling an <u>augmented bonding curve</u>, where the cost function will be parameterized by block reward and token burn events occurring within the Wireline sidechain.

The ORU will act as a link between the conditional escrow system and the Wireline sidechain, which will handle WNS, WES, and the WUSD stablecoin generation, providing settlement guarantees while minimizing gas costs.

The conditional escrow's price curve should be monotonically increasing, however the exact shape of this curve is yet to be determined, we will use a simple linear equation here for illustrative purposes.

The price of wire f(x) is then

$$f(x) = m(x + i - b)$$

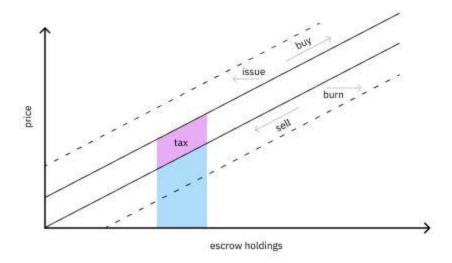
where,

m = arbitrary constant slope

x =current supply

i = issuance from block reward

b = burn quantity from validation slashing or VDF challenge failure



There are two ways to interact with the escrow contract. The first follows the typical purchase at a price dictated by the cost function. A gap between the buy and sell curves represents a tax, which serves to dissuade pump-and-dump trading strategies. The gap between the buy and sell curves should be constructed such that token holders are disincentivised to transact at either extrema, additionally the escrow contract will invalidate any transaction that brings the WIRE supply to 0% or 100%.

The conditional escrow contract also allows validators and services providers to redeem proofs of participation to claim their block reward as part of ORU settlement. Fraud proofs submitted for VDF staking challenges similarly allow reward withdrawal from the escrow contract, while contributing the remaining burnt funds back into the treasury.

Why contribute ETH / DAI to the escrow at initialization?

A pool of ETH/Dai should be contributed to the curve at initialization for two reasons. The first is to allow organic price discovery, required to ensure WIRE has some value to secure the network immediately upon launch (preventing "nothing at stake" attack). The second is to allow recipients of the block reward (stakers and grant recipients in particular) to convert some of their working capital, held in WIRE, into a more liquid asset. This lowers the barrier to entry for less well-capitalized stakers and helps to bootstrap a functional service economy.

What will investor's staking return look like at 1 year?

Assuming investors are participating in validation, their return will be equal to the fraction of total stake they have upon initialization multiplied by the block reward at each epoch, compounded each epoch.

If they choose to delegate their stake to another validator, their per-block return will be reduced by the delegation commission rate, which is set by the delegator and typically ranges between 3-12%.